Safety Officers / Collateral Duty Safety Officers: What is Industrial Hygiene and Medical Surveillance

eferences:

epartment of Defense Instruction 6055.1
PNAVINST 5100.23 (Series)
ureau of Naval Medicine (Navy and Marine Corps Public Health System
avy Environmental Health Center
ode of Federal Regulations

What is it, why do we do it?

OPNAVINST 5100.23(G)
Chapter 3

Paragraph 0305

a. “The Preventive Medicine and Occupational Health Division administers the program within the Chief, Bureau of Medicine and Surgery (BUMED). The occupational health and preventive medicine directorate administers the program at the hospital or clinic level. The director shall have direct access to the medical facility commanding officer and/or clinic officer in charge. Industrial hygiene and occupational medicine shall be divisions of occupational health and preventive medicine directorates. As a rule, military industrial hygienists shall provide dedicated service to the operating forces and the fleet, and civilian industrial

OPNAVINST 5100.23 (G)
Chapter 0802. Industrial Hygiene

a. Navy industrial hygiene personnel anticipate, recognize, evaluate, and make recommendations to control unacceptable workplace exposures. Exposure assessment of Navy workplaces requires a sound, logical strategy and shall be based on references in chapter 8. "The purpose of such a strategy is to accomplish at least four goals:
(1) To assess potential health risks faced by Navy personnel by understanding their exposures, to differentiate between acceptable and unacceptable exposures, and to control unacceptable exposures.
(2) To establish and document a historical record of exposure levels for Navy personnel and to communicate exposure monitoring results.
(3) To ensure and demonstrate compliance with safety and health exposure criteria.
(4) To provide a basis for ***medical surveillance examinations***."

b. “The occupational exposure assessment strategy is the plan for recognizing, evaluating, and documenting all exposures, and for developing controls for occupational exposures that are judged unacceptable. There are five major steps in setting up a functioning occupational exposure assessment program:

(1) Basic characterization
(2) Exposure Assessment
(a) Define similar exposure groups (SEG)
(b) Define exposure profiles for each SEG
(c) Judge acceptability of the exposure profile for each SEG
(d) Recommend control strategies
(3) Further information gathering
(4) Communications and Documentation
(5) Reassessment” (This is accomplished annually

Workplace Monitoring Plan

Shall be prepared and implemented if the exposure assessment indicates workers are exposed to toxic chemicals and/or harmful physical agents. The plan must be developed jointly by the Industrial Hygienist, cognizant Medical Treatment Facility & Safety Manager.

Each workplace must be evaluated to identify potential hazards from toxic substances or harmful physical agents. Workplace monitoring shall be provided by the IH Department in accordance with OPNAVINST 5100.23 (Series) .

Any permanent changes to workplace procedures or work location will require a updated survey to include workplace monitoring.

What an Industrial Hygiene Survey ***IS*** and what it ***IS NOT***

"The Industrial Hygiene (IH) Survey identifies potential health hazards associated with work processes surveyed, (i.e. respiratory protection, chemical use, noise, etc.) The IH Survey MAY NOT ALWAYS determine "other" PPE requirements, especially those associated with potential exposure to physical hazards. For example, an IH survey may address the use of gloves when working with chemicals, but it may not address the use of gloves if working with metal. The IH survey may require the use of eye protection for certain chemical exposures, but not address eye or face protection when working around flying particles or molten metals. The IH survey typically will not address the need for Fall Protection, Foot Protection, and Head Protection.

29 CFR 1960.26(3)

"When, in the opinion of the inspector (IH), it is necessary to conduct personal monitoring (sampling) of employee's work environments, the inspector may request employees to wear reasonable and necessary personal monitoring devices, e.g., noise dosimeters and air sampling pumps, for periods determined by the inspector to be necessary for complete and effective sampling of the environment. (Industrial Hygiene Survey)"

29 CFR 1960.26(b)

"Inspection. (1) For the purpose of assuring safe and healthful working conditions for employees of agencies, the head of the agency shall authorize safety and/or health inspectors: To enter without delay, and at reasonable times, any building, installation, facility, construction site, or other area, workplace, or environment where work is performed by employees of the agency; to inspect and investigate during regular working hours and at other reasonable times, and within reasonable limits and in a reasonable manner, any such place of employment and all pertinent conditions, structures, machines, apparatus, devices, equipment, and materials therein, and to question privately any agency employee, and/or any agency supervisory employee, and/or any official in

Note : Chapter 5:
Exposure limits, such as permissible exposure limits established by OSHA, or threshold limit values established by the American Conference of Governmental Industrial Hygienists (ACGIH) are intended for use in the practice of industrial hygiene and are to be interpreted and applied only by a person trained in this discipline.

Chapter 16 “OSH Standards” (b)(3) “Navy developed standards. When there is no OSHA PEL or Navy developed standard, the American Conference of Governmental Industrial Hygienists (ACGIH) threshold limit value (TLV) shall be used as the Navy OEL. When the OEL is based on a limit derived from the OSHA Z-1, Z-2 or Z-3 tables, reports of data shall include the ACGIH TLV as additional guidance.”

Definition: Occupation Exposure Limit (OEL) – “The exposure limit used by a health professional to help determine a workers’ or populations’ health risk form exposure to a hazard. “OEL” is a generic term used to apply to all exposure limits, to include: DoD standards from DoDI 6055.1, Occupational Safety and Health Administration (OSHA), Permissible Exposure Limits (PELs), DoD Component standards, military deployment environmental health limits, American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values

Medical Surveillance

re is an example of Medical Surveillance requirement from an IH Surv
te: the numbers and requirements come from the Navy Marine Corps
blic Health Command Technical Manual (NMCPHC-TM) OM 6260,
edical Surveillance Procedures and Medical Matrix
ysicals are performed as per the NMPHC-TM

mples:

4 Cadmium
2 Metal Working Fluids
3 Noise
2 Metal Fumes
0 Forklift Operator
2 Motor Vehicle Operator (Other than DOT)
6 Respiratory Protection

Personal Protective Equipment (PPE)

PPE is the last step in protecting the employee from hazards.
If engineering controls or administrative controls cannot be incorporated than PPE will be required.

Navy Policy is to provide and maintain PPE when ***competent authority*** (*that is usually the Safety Professional*) determines that its use is necessary…
Activities shall provide necessary PPE…
PPE procurement and enforcement of proper use and maintenance is the

Standards

- Hard hats – 29 CFR 1910.135
- Safety shoes – 29 CFR 1910.132
- Hand protection – 29 CFR 1910.138
- Clothing – 29 CFR 1910.132
- Fall Protection - 29CFR 1926.501
- Personal Flotation Devices – 29 CFR 1917.95
- Hearing protection 29 CFR 1910.95
- Sight protection – 29 CFR 1910.133
- Respirators - 29 CFR 1910.134

The information in the Industrial Hygiene Survey, Medical Matrix, or PPE requirements are ***not secrets.***

ALL THE INFORMATION IS IN THE LOCAL SAFETY OFFICE. MEMBERS HAVE THE RIGHT TO REVIEW IT AT ANY TIME.

SO’s/CDSO’s bottom line if you’re not sure, ask questions.
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